

<110> Tang, Y. Tom
Corley, Neil C.
Guegler, Karl J.
Arvizu, Chandra
Baughn, Mariah R.

<120> THIOREDOXIN PROTEINS

<130> PF-0556-1 DIV

<140> To Be Assigned

<141> Herewith

<150> 09/107,248

<151> 1998-06-30

<160> 15

<170> PERL Program

<210> 1

<211> 172

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1925679

<400> 1

Met	Glu	Thr	Arg	Pro	Arg	Leu	Gly	Ala	Thr	Cys	Leu	Leu	Gly	Phe
1				5					10					15
Ser	Phe	Leu	Leu	Leu	Val	Ile	Ser	Ser	Asp	Gly	His	Asn	Gly	Leu
			20						25					30
Gly	Lys	Gly	Phe	Gly	Asp	His	Ile	His	Trp	Arg	Thr	Leu	Glu	Asp
			35						40					45
Gly	Lys	Lys	Glu	Ala	Ala	Ser	Gly	Leu	Pro	Leu	Met	Val	Ile	
			50						55					60
Ile	His	Lys	Ser	Trp	Cys	Gly	Ala	Cys	Lys	Ala	Leu	Lys	Pro	Lys
			65						70					75
Phe	Ala	Glu	Ser	Thr	Glu	Ile	Ser	Glu	Leu	Ser	His	Asn	Phe	Val
			80						85					90
Met	Val	Asn	Leu	Glu	Asp	Glu	Glu	Glu	Pro	Lys	Asp	Glu	Asp	Phe
			95						100					105
Ser	Pro	Asp	Gly	Gly	Tyr	Ile	Pro	Arg	Ile	Leu	Phe	Leu	Asp	Pro
			110						115					120
Ser	Gly	Lys	Val	His	Pro	Glu	Ile	Ile	Asn	Glu	Asn	Gly	Asn	Pro
			125						130					135
Ser	Tyr	Lys	Tyr	Phe	Tyr	Val	Ser	Ala	Glu	Gln	Val	Val	Gln	Gly
			140						145					150
Met	Lys	Glu	Ala	Gln	Glu	Arg	Leu	Thr	Gly	Asp	Ala	Phe	Arg	Lys
			155						160					165
Lys	His	Leu	Glu	Asp	Glu	Leu								
														170

<210> 2

<211> 258

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3244141

<400> 2

Met Ala Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro
 1 5 10 15
 Arg Leu Ser Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala
 20 25 30
 Leu Leu Ser Ala Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu
 35 40 45
 Cys His Gly Leu Pro Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp
 50 55 60
 Phe Asp Trp Arg Glu Val Glu Ile Leu Met Phe Leu Ser Ala Ile
 65 70 75
 Val Met Met Lys Asn Arg Arg Ser Met Phe Leu Met Thr Cys Lys
 80 85 90
 Pro Pro Leu Tyr Met Gly Pro Glu Tyr Ile Lys Tyr Phe Asn Asp
 95 100 105
 Lys Thr Ile Asp Glu Glu Leu Glu Arg Asp Lys Arg Val Thr Trp
 110 115 120
 Ile Val Glu Phe Phe Ala Asn Trp Ser Asn Asp Cys Gln Ser Phe
 125 130 135
 Ala Pro Ile Tyr Ala Asp Leu Ser Leu Lys Tyr Asn Cys Thr Gly
 140 145 150
 Leu Asn Phe Gly Lys Val Asp Val Gly Arg Tyr Thr Asp Val Ser
 155 160 165
 Thr Arg Tyr Lys Val Ser Thr Ser Pro Leu Thr Lys Gln Leu Pro
 170 175 180
 Thr Leu Ile Leu Phe Gln Gly Gly Lys Glu Ala Met Arg Arg Pro
 185 190 195
 Gln Ile Asp Lys Lys Gly Arg Ala Val Ser Trp Thr Phe Ser Glu
 200 205 210
 Glu Asn Val Ile Arg Glu Phe Asn Leu Asn Glu Leu Tyr Gln Arg
 215 220 225
 Ala Lys Lys Leu Ser Lys Ala Gly Asp Asn Ile Pro Glu Glu Gln
 230 235 240
 Pro Val Ala Ser Thr Pro Thr Thr Val Ser Asp Gly Glu Asn Lys
 245 250 255
 Lys Asp Lys

<210> 3

<211> 1440

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1925679

<400> 3

tctgggaagt agaggtgttg tgctgagcgg cgctcggcga actgtgtgga ccgtctgctg 60
 ggactccggc cctgcgtccg ctcagccccg tggccccgcg cacctactgc catggagacg 120
 cggcctcgtc tcggggccac ctgtttgctg ggcttcagtt tcctgctcct cgtcatctct 180
 tctgatggac ataatgggct tggaaagggg tttggagatc atattcattg gaggacactg 240
 gaagatggga agaaagaagc agctgccagt ggactgcccc tgatgggtgat tattcataaa 300
 tcctggtgtg gagcttgcaa agctctaaag cccaaatttg cagaatctac ggaaatttca 360

```

gaactctccc ataattttgt tatggtaaata cttgaggatg aagaggaacc caaagatgaa 420
gatttcagcc ctgacggggg ttatattcca cgaatccttt ttctggatcc cagtggcaag 480
gtgcatcctg aaatcatcaa tgagaatgga aaccccagct acaagtattt ttatgtcagt 540
gccgagcaag ttgttcaggg gatgaaggaa gctcaggaaa ggctgacggg tgatgccttc 600
agaaagaaac atcttgaaga tgaattgtaa catgaatgtg ccccttcttt catcagagtt 660
agtgttctgg aaggaaagca gcagggaagg gaattattgag gaatcatcta gaacaattaa 720
gccgaccagg aaacctcatt cctacctaca ctggaaggag cgctctcact gtggaagagt 780
tctgctaaca gaagctgggc tgcattgttg tggatccagc ggagagtggc agactttctt 840
ctccttttcc ctctcaccta aatgtcaact tgtcattgaa tgtaaagaat gaaaccttct 900
gacacaaaac ttgagccact tggatgttta ctctctgcac ttaagtattt gagtcttttc 960
ccatttcttc ccactttact caccttagtg gtgaaaggag actagtagca tcttttctac 1020
aacgttaaaa ttgcagaagt agcttatcat taaaaaacia caacaacaac aataacaata 1080
aatcctaagt gtaaatacgt tattctaccc cctaccaagg atatcagcct gttttttccc 1140
ttttttctcc tgggaataat tgtgggcttc ttcccaaatt tctacagcct ctttctctct 1200
ctcatgcttg agcttccctg tttgcacgca tgcgtgtgca ggactggctg tgtgcttgga 1260
ctcggctcca ggtggaagca tgctttccct tgttactgtt ggagaaactc aaaccttcaa 1320
gccctagggt tagccatttt gtcaagtcac caactgtatt tttgtactgg cattaacaaa 1380
aaaagagata aaatattgta ccattaaact ttaataaaac tttaaaagga aaaaaaaaaa 1440

```

<210> 4

<211> 1555

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3244141

<400> 4

```

aggggaggcg gggcgagacc tacgacgccg gcgagcagtg gccgttacgg ccgaaaagat 60
ggcgggtcttg gcacctctaa ttgctctcgt gtattcgggtg ccgcgacttt cagcatggct 120
cgcccaacct tactaccttc tgcgcgccct gctctctgct gccttcttac tcgtgaggaa 180
actgcgcgag ctctgccacg gtctgcccac ccaacgcgaa gacggtaacc cgtgtgactt 240
tgactggaga gaagtggaga tctgatgtt tctcagtgcc attgtgatga tgaagaaccg 300
cagatccatg ttcttgatga cgtgcaaacc cccctatat atgggccctg agtatatcaa 360
gtacttcaat gataaaacca ttgatgagga actagaacgg gacaagaggg tcacttggat 420
tgtggagtgc tttgccaatt ggtctaata ctgccaatca tttgccctta tctatgctga 480
cctctccctt aaatacaact gtacagggtt aaattttggg aagggtggatg ttggacgcta 540
tactgatgtt agtacgcggt acaaagtgag cacatcaccc ctaccaagc aactccctac 600
cctgatcctg ttccaagggtg gcaaggaggc aatgcggcgg ccacagattg acaagaaagg 660
acgggctgtc tcatggacct tctctgagga gaatgtgatc cgagaattta acttaaatga 720
gctataccag cgggccaaga aactatcaaa ggctggagac aatatccctg aggagcagcc 780
tgtggcttca acccccacca cagtgtcaga tggggaaaac aagaaggata aataagatcc 840
tcactttggc agtgccttct ctctgtcaa ttccaggctc tttccataac cacaagcctg 900
aggctgcagc cttttattta tgttttccct ttggctgtga ctgggtgggg cagcatgcag 960
cttctgattt taaagaggca tctagggaat tgtcaggcac cctacaggaa ggcttgccat 1020
gctgtggcca actgtttcac tggagcaaga aagagatctc ataggacgga gggggaaatg 1080
gtttccctcc aagcttgggt cagtgtgtta actgcttacc agctattcag acatctccat 1140
ggtttctcca tgaaactctg tggtttcac attccttctt agttgacctg cacagcttgg 1200
ttagacctag atttaaccct aaggttaagt gctggggtat agaacgctaa gaattttccc 1260
ccaaggactc ttgcttccct aagcccttct ggcttcgttt atggcttcca ttaaaagtat 1320
aagcctaact ttgtcgctag tctaaggag aaacctttaa ccacaaagt tttatcattg 1380
aagacaatat tgaacaaccc cctattttgt ggggattgag aaggggtgaa tagaggcttg 1440
agactttcct ttgtgtggtg ggacttggag gagaaatccc ctggactttc actaaccttc 1500
tgacatactc cccacacca gttgatggct ttccgtaata aaaagattgg gatta 1555

```

<210> 5

<211> 212

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1925679H1

<400> 5
gatgggaaga aagaagcagc tgccagtgga ctgcccctga tgggtgattat tcataaatcc 60
tgggtgtggag cttgcaaagc tctaaagccc aaatttgcag aatctacgga aatttcagaa 120
ctctcccata attttgttat ggtaaattctt gaggatgaag aggaacccaa agatgaagat 180
ttcagccctg acgggggtta tattccacga at 212

<210> 6
<211> 248
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2456812H1

<400> 6
atctgggaag tagaggtggt gtgctgagcg gcgctcggcg aactgtgtgg accgtctgct 60
gggactccgg cctgcgctcc gctcagcccc gtggccccgc gcacctactg ccatggagac 120
gcggcctcgt ctcggggcca cctgtttgct gggtttcagt ttctgctcc tcgtcatctc 180
ttctgatgga cataatgggc ttggaaagggt ttttgagat catattcatt ggaggacact 240
ggaagatg 248

<210> 7
<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1925679R6

<220>
<221> unsure
<222> 502, 514
<223> a, t, c, g, or other

<400> 7
gatgggaaga aagaagcagc tgccagtgga ctgcccctga tgggtgattat tcataaatcc 60
tgggtgtggag cttgcaaagc tctaaagccc aaatttgcag aatctacgga aatttcagaa 120
ctctcccata attttgttat ggtaaattctt gaggatgaag aggaacccaa agatgaagat 180
ttcagccctg acgggggtta tattccacga atcctttttc tggatcccag tggcaagggtg 240
catcctgaaa tcatcaatga gaatggaaac ccagctaca agtattttta tgtcagtgcc 300
gagcaagttg ttcaggggat gaaggaagct caggaaaggc tgacgggtga tgccttcaga 360
aagaaacatc ttgaagatga attgtaacat gaatgtgccc cttctttcat cagagttagt 420
gttctggaag gaaagcagca gggaaggga tattgaggaa tcatctagaa caattaagcc 480
gaccaggaaa cctcattcct anctacactg gaangagcgc tctcactgtg gaagagttct 540
g. 541

<210> 8
<211> 578
<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1522838F1

<220>

<221> unsure

<222> 530, 556, 573

<223> a, t, c, g, or other

<400> 8

```
cggaaatttc agaactctcc cataattttg ttatggtaaa tcttgaggat gaagaggaac 60
ccaaagatga agatttcagc cctgacgggg gttatatcc acgaatcctt tttctggatc 120
ccagtggcaa ggtgcatcct gaaatcatca atgagaatgg aaaccccagc tacaagtatt 180
tttatgtcag tgccgagcaa gttgttcagg ggatgaagga agctcaggaa aggctgacgg 240
gtgatgcctt cagaaagaaa catcttgaag atgaattgta acatgaatgt gccccttctt 300
tcatcagagt tagtgttctg gaaggaaagc agcagggaag ggaatattga ggaatcatct 360
agaacaatta agccgaccca ggaaacctcc attcctacct acactggaag gagcgctctc 420
actgtggaag agttctgcta acagaagctg gtctgcatgt ttgtggatcc agcggagagt 480
ggcagacttt cttctccttt tcctctcact aaatgtcaac ttgtcattgn atgtaaagat 540
gaaaccttct gacacnaaac ttgaggccac ttngatgt 578
```

<210> 9

<211> 635

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1332915T1

<220>

<221> unsure

<222> 342-370, 570, 572

<223> a, t, c, g, or other

<400> 9

```
aagttttatt aaagtttaat ggtacaatat tttatctctt tttttgttaa tgccagtaca 60
aaaatacagt tgatgacttg acaaaatggc tacacctagg gcttgaaggt ttgagtttct 120
ccaacagtaa caagggaaag catgcttcca cctggagccg agtccaagca cacagccagt 180
cctgcacacg catgcgtgca aacaggggaag ctcaagcatg agaagaggaa agaggctgta 240
gaaatttggg aagaagccca caattattcc caggagaaaa aagggaaaaa acaggctgat 300
atccttggtg gggggtagaa taactgattt acacttagga tnnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn taatgataag ctacttctgc aattttaacg ttgtagaaaa gatgctacta 420
gtctcctttc accactaagg ttagtaaagt gggagggaat gggaaaagac tcaaatactt 480
aagtgcgagg agtaaacatc caagtggctc aagttttgtg tcagaaggtt tcattcttta 540
cattcaatga caagttgaca tttaggtgan anggaaaagg agaagaaagt ctgccactct 600
ccgctggatc cacaacatgc agaccagctt ctggtt 635
```

<210> 10

<211> 127

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1458332H1

<400> 10

agaaactcaa accttcaagc cctaggtgta gccattttgt caagtcatca actgtatttt 60
 tgtactggca ttaacaaaaa aagagataaa atattgtacc attaaacttt aataaaactt 120
 taaaagg 127

<210> 11

<211> 224

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3244141H1

<400> 11

ggcgggtcttg gcacctctaa ttgtctctgt gtattcgggtg ccgcgacttt cagcatggct 60
 cgcccaacct tactaccttc tgtcggccct gctctctgt gccttcctac tcgtgaggaa 120
 actgccgccg ctctgccacg gtctgccac ccaacgcgaa gacgagagaa gtggagatcc 180
 tgatgtttct cagtgccatt gtgatgatga agaaccgcag atcc 224

<210> 12

<211> 435

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1480867F6

<220>

<221> unsure

<222> 265, 370, 413

<223> a, t, c, g, or other

<400> 12

ggggaggcgg ggcgagacct acgacgccgg cgagcagtgg ccgttacggc gaaaagatgg 60
 cgggtcttggc acctctaatt gctctcgtgt attcggtgcc gcgactttca cgatggctcg 120
 cccaacctta ctaccttctg tcggccctgc tctctgctgc ctctctactc gtgaggaaac 180
 tgccgccgct ctgccacggt ctgcccaccc aacgcgaaga cggtaaccgg tgtgactttg 240
 actggagaga agtggagatc ctgangtttc tcagtgccat tgtgatgatg aagaaccgca 300
 gatccatgtt cctgatgacg tgcaaaccce ccctatatat gggccctgag tatatcaagt 360
 acttcaatgn taaaaccatt gatgaggaac tagaacggga caagagggtc acntggattg 420
 tgggggtttt gccaa 435

<210> 13

<211> 631

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1709993X25C1

<220>

<221> unsure

<222> 436, 493, 507, 558, 627-628, 630

<223> a, t, c, g, or other

<400> 13

```

tttgccaatt ggtctaata ctgccaatca tttgccccta tctatgctga cctctccctt 60
aaatacaact gtacagggct aaattttggg aaggtggatg ttggacgcta tactgatgtt 120
agtacgcggt acaaagttag cacaacaccc tcaccaagca actccctacc ctgatcctgt 180
tccaaggtgg caaggaggga atgcgggcggc cacagattga caagaaagga cgggctgtct 240
catggacctt ctctgaggag aatgtgatcc gagaatttaa cttaaatgag ctataccagc 300
gggccaagaa actatcaaag gctggagaca atatccctga ggagcagcct gtggcttcaa 360
ccccaccac agtgtcagat ggggaaaaca agaaggataa ataagatcct cactttggca 420
gtgcttcctc tcctgncaat tccaggctct ttccataaac cacaagcctg aggctgcagc 480
ttttatttat gtnttccctt gggctgngac tgggtggggc agcatgcagc tttctgattt 540
taaagaggca tctaggggat gtcaggcacc ctacaggaag gctgccatgc tgtgggcaac 600
tgtttctactg ggggcaagaa agagatnntn a 631

```

<210> 14

<211> 660

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2061104R6

<220>

<221> unsure

<222> 98, 217, 348, 378, 458, 480, 488, 491, 516, 521, 531, 545, 548, 553-554, 559, 583, 589, 595, 620, 632-634, 637, 642, 651

<223> a, t, c, g, or other

<400> 14

```

gcggtacaaa gtgagcacat caccctcac caagcaactc cctaccctga tcctgttcca 60
aggtggcaag gaggcaatgc ggcggccaca gattgacnag aaaggacggg ctgtctcatg 120
gaccttctct gaggagaatg tgatccgaga atttaactta aatgagctat accagcgggc 180
caagaaacta tcaaaggctg gagacaatat ccctgangag cagcctgtgg cttcaacccc 240
caccacagtg tcagatgggg aaaacaagaa ggataaataa gatcctcact ttgggcagtg 300
cttctctctc tgtcaattcc tggctctttt cataaccaca agcctgangt gcagctttta 360
tttaattggt tccccttntg gctgtgactt ggggtggggc agcatgcagc tttctgattt 420
taaaagaggg cattctaggg gaatttggtt aaggcaancc ctaacaggga aagggcctgn 480
ccaattgnct nttggcccaa actgggtttt caactnggga ngccaaagaa naaggggggtt 540
cttcnatnag ggnnccggna agggggggga aaattggggt ttncctcctnc caaangcttt 600
tggggttaaa aaatggggtt aaacttggcc tnnntcnagg gntgaatttc ngggagaatt 660

```

<210> 15

<211> 596

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1437141T6

<220>

<221> unsure

<222> 14, 17, 19, 79, 477, 486, 508, 529, 544, 547, 551, 559, 572, 585, 588, 591, 595

<223> a, t, c, g, or other

<400> 15

```

ttctcgcttc tagntgnanc cctttttatt agggaaagcc atcaactggg tgtggggagt 60

```

```

atgtcagagg gttagt gana gtccagggga tttctcctcc aagtcctacc acacaaagga 120
aagtctcaag cctctattca ccccttctca atccccacaa aataggggggt tgttcaatat 180
tgtcttcaat gataaaaact ttgtgggttaa aggtttctcc ttaggactag cgacaaagtt 240
aggcttatac ttttaatgaa gaccataaac gaagccagaa gggcttaagg aagcaagagt 300
ccttggggga aaattcttag cgttctatac cccagcatct taccttaggg ttaaatctag 360
gtctaacc aa gctgtgcagg tcaactaaga aggaatgatg aaaccacaga gtttcatgga 420
gagaccatgg agatgtctga atagctgata agcagttaac aactgaccc aagcttngag 480
ggaaancatt tccccctccg tcctaata nag atctctttct ttgctccant gaaaaaagtt 540
tggncanaag natggccang ggctttcctg tnaggggggc ctganaantt nccna 596

```

09954846-091701